

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Hideaki TAKASE, et al.

SERIAL NO: New U.S. PCT Application Based on PCT/JP03/12479

GAU:

FILED: Herewith

EXAMINER:

FOR: PHOTSENSITIVE RESIN COMPOSITION FOR OPTICAL WAVEGUIDE FORMATION AND OPTICAL WAVEGUIDE

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s), published application(s) or issued patent(s) which may be related to the present application. In accordance with the waiver of 37 CFR 1.98 dated September 21, 2004, copies of the cited pending applications are not provided. Cited published and/or issued patents, if any, are listed on the attached PTO form 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

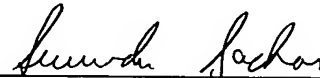
- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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Form PTO 1449
(Modified)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO.

266826US0PCT

SERIAL NO. 10/527547
New U.S. PCT Application
Based on PCT/JP03/12479

LIST OF REFERENCES CITED BY APPLICANT

APPLICANT

Hideaki TAKASE, et al.

FILING DATE

Herewith

GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AO	06-273631	09/30/94	JP(with English abstract)		NO
	AP	1-299807	12/04/89	JP(with English abstract)		NO
	AQ	3-31309	02/12/91	JP(with English abstract)		NO
	AR	60-202110	10/12/85	JP(with English abstract)		NO
	AS	2000-66051	03/03/00	JP(with English abstract)		NO
	AT	5-119203	05/18/93	JP(with English abstract)		NO
	AU					
	AV					

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AW	
	AX	
	AY	
	AZ	

☐ Additional References sheet(s) attached

Examiner

Date Considered

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

New U.S. PCT Application Based on PCT/JP03/12479
Docket No.: 266826US0PCT

STATEMENT OF RELEVANCY

- 1) References AP-AT have been cited in the International Search Report. Copies of these references are being submitted herewith only when not automatically provided by the International Searching Authority.
- 2) References _____ have been cited in the corresponding _____ Search Report. A copy of these references is being submitted herewith.
- 3) References AO are discussed in the specification. A copy of these references is being submitted here with.
- 4) Reference _____ is additional prior art known to Applicant. A copy of these references is being submitted herewith.

EXPLANATION OF EACH DOCUMENT

JP 6-273631

Document 1 discloses an optical waveguide formed by using a UV curing resin essentially consisting of a specific epoxy resin. Document 1 does not disclose components which correspond to the components (A)-(C) and tris(2-acryloyloxyethyl)isocyanurate of the present invention.

JP 1-299807

Document 2 discloses a curable resin composition comprising components which correspond to the components (A)-(C) of the present invention as shown as general chemical formulas (I) and (II) on page 1. However, Document 2 does not disclose tris(2-acryloyloxyethyl)isocyanurate of the present invention.

JP 3-31309

Document 3 discloses a composition for preparing resin having high refractive index comprising components which correspond to the components (A)-(C) of the present invention as shown as general chemical formulas (A1) and (A2) on page 3.

However, Document 3 does not disclose tris(2-acryloyloxyethyl)isocyanurate of the present invention.

JP 60-202110

Document 4 discloses a composition for high-refractive index resin which comprises components corresponding to the components (A)-(C) of the present invention and which further comprises trimethylolpropane triacrylate as a (meth)acrylate having 3 (meth)acryloyl groups as shown in Example 2 in Table 1 on page 7. However, Document 4 does not disclose tris(2-acryloyloxyethyl)isocyanurate of the present invention as a (meth)acrylate having 3 (meth)acryloyl groups.

JP 2000-66051

Document 5 discloses an optical waveguide which consists of a specific hydrolyzable silane compound composition and which may include Aronix M315 (manufactured by Toa Gosei K.K.), which is a commercial product name of tris (2-acryloyloxyethyl)isocyanurate, as a reactive diluent as described in line 4 of the left column on page 13.

Document 5 also discloses a method for manufacturing an optical waveguide comprising a step of irradiating a composition with radiation via a photomask and curing the composition as shown in Fig.2 on page 17.

However, Document 5 does not disclose components which correspond to the components (A)-(C) of the present invention.

JP 5-119203

Document 6 discloses a method for manufacturing an optical waveguide comprising a step of irradiating a composition with radiation via a photomask and curing the composition as shown in Figs.5 and 8 on page 4. However, Document 6 does not disclose components which correspond to the components (A)-(C) and tris(2-acryloyloxyethyl)isocyanurate of the present invention.